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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,337	07/21/2006	Laurence C. Chow	010118.00049	1875
22908 7590 03/13/2009 BANNER & WITCOFF, LTD. TEN SOUTH WACKER DRIVE SUITE 3000 CHICAGO, IL 60606				
EXAMINER				
GITOMER, RALPH J				
ART UNIT		PAPER NUMBER		
1657				
MAIL DATE		DELIVERY MODE		
03/13/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/552,337

**Applicant(s)**

CHOW ET AL.

**Examiner**

Ralph Gitomer

**Art Unit**

1657

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 26-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date 1/13/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

The IDS received 1/13/09 and the amendment received 2/6/09 have been entered and claims 1-6, 26-30 are currently pending in this application. The claims have been properly renumbered according to Rule 1.126 because two claims 29 are presented. Again, please inform the examiner of any related cases, abandoned, pending or allowed. The amended title is acceptable. Applicants have not informed the examiner as to how the present application differs from the parent application to which priority is claimed. It appears in 10/057,554 (6,793,725) the hardening time is greater than 60 minutes where in the present specification and claims the hardening time is less than 35 minutes. Therefor, no priority is granted to 10/057,554, only to 60/461,338 filed April 8, 2003 which is the first application in the series to teach organic acids to decrease setting time. Chow (7,294,187) filed September 15, 2004 does not have double patenting issues because it does not claim glycerin in the composition. And it is not available as prior art to the present application.

In claim 2 "further including" may be intended.

In view of the amendments to the claims and arguments presented, the rejections of record under 35 USC 102(a) and 103(a) are hereby withdrawn. However, note the new rejections following based on references presented in the newly submitted IDS provided.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6, 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Tatsuzo.

Tatsuzo (JP 02311406) entitled "Root Canal Filling Material Composition", English abstract only provided, a full English translation has been ordered but is not yet available, teaches in the abstract a composition containing a calcium phosphate, plus an organic acid such as citric acid, malonic acid, malic acid or maleic acid, and additionally glycerin, ethylene glycol or propylene glycol.

All the features of the claims are taught by Tatsuzo for the same function as claimed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 3, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Tatsuzo in view of Mandal.

See the teachings of Tatsuzo above.

The claims differ from Tatsuzo in that they include a gelling agent in the composition and setting times between about 5 to 15 minutes.

Mandal (EP 0520690 A2) entitled "Calcium Phosphate Type Hardening Material for Repairing Living Hard Tissue" teaches on page 3 lines 38-40, a composition with organic acids including citric acid, malic acid, malonic acid, and maleic acid. On page 3 and throughout the specification, calcium phosphate compounds are disclosed. On page 4 first full paragraph, thickeners are shown including carboxymethyl cellulose are shown. On page 8 Tables 2 and 3 show composition with setting times between about 5 to 15 minutes.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the thickening agents of Mandal in the composition of Tatsuzo because such dental restoration compositions require a range of viscosity to be useful and Mandal teaches the same agents as claimed to modify the viscosity. The compositions of both Mandal and Tatsuzo require particular ranges of viscosity to be useful. Many dental compositions, from endo cement, bone cement to composites, have desirable physical characteristics based upon their viscosity and altering the viscosity of such compositions by various means is well known in this art. Agents and techniques which thicken or thin calcium based cements are conventional in this art.

Claims 1-4, 6, 26-30 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for certain carboxylic acids, does not reasonably provide enablement for "an organic acid". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

In claim the terms "an organic acid" lack enablement as it would require one of ordinary skill in this art undue experimentation to determine which such acid would work in the instant invention.

The entire scope of the claims has not been enabled because:

1. Quantity of experimentation necessary would be undue because of the large proportion of inoperative compounds claimed.

2. Amount of direction or guidance presented is insufficient to predict which substances encompassed by the claims would work.
3. Presence of working examples are only for specific substances and extension to other compounds has not been specifically taught or suggested.
4. The nature of the invention is complex and unpredictable.
5. State of the prior art indicates that most related substances are not effective for the claimed functions.
6. Level of predictability of the art is very unpredictable.
7. Breadth of the claims encompasses an innumerable number of compounds.
8. The level of one of ordinary skill in this art is variable.

In re Wands, 858 F.2d 731, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

Applicant's arguments filed 2/6/09 have been fully considered but they are not persuasive.

Applicants response argues that the specification teaches specific organic acids for the claimed invention.

It is the examiner's position that the claims are directed to "an organic acid" which would require undue experimentation to determine which such acid would work in the invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ralph Gitomer whose telephone number is (571) 272-0916. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on (571) 272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ralph Gitomer/  
Primary Examiner, Art Unit 1657

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